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**EL7001-8**

**Dr. Glen Gatin**

**Principles and Practices of E-Learning**

**Assignment 3: Models of E-Learning**

**Comments: none at this time**

**Faculty Use Only**

Great model and approach, Michael.

This seems like a viable approach.

Remember that the doctoral level scholar is more interested in the theory and the research conducted to test the theory than the application of the theory or model. Once scholars, (you) have verified the theory, practitioners will use that theory to develop models and interventions. The scholars role is vital but limited in scope.

Gatin July 6, 2013

## Developing an e-Learning Program

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## Developing an e-Learning Program

The development and implementation of an e-learning program within any organization requires effective leadership and a detailed plan to help make it successful. There are several e-learning theories, concepts, and models which can be used in the development of an appropriate and effective e-learning approach however, the needs and goals of the organization must be carefully considered before selecting the appropriate model. The purpose of this paper is to

identify an e-learning approach best suited for a specific organizational goal, and to discuss the elements that will be critical for the program's success and future growth.

### **Organization**

The organization I have chosen is a public school system, which already has in place a virtual, module led, online infrastructure used to address high school credit deficiencies and middle school content recovery. This existing infrastructure will be used as a spring board in the development of a newly innovative blended online learning environment. The existing infrastructure already has in place elements identified in the [The Seven Step Plan to Effective eLearning](#), which the author states "form the foundation for every single effective eLearning program" (Gutierrez, 2013, para. 2). This makes using the existing infrastructure a good starting place to transition.

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**Comment [1]:** Focus on concepts and ideas rather than publications or authors.

### **Program**

#### **Goal**

The goal of this program is to provide an e-learning environment for students in Kindergarten through 12th grade where information and communication technology (ICT) support learning. This program would be an online alternative to the traditional classroom environment and would provide blended online learning strategies for students with synchronous and asynchronous learning activities. Currently the only e-learning infrastructure that the school system has developed and is utilizing is an online module led environment by which only asynchronous learning activities are being used. This creates a need to incorporate ICT principles into the current online model, which lends itself to a social-interactionist approach.

## Model

E-learning is a combination of individual-cognitive and social-interactionist processes which is a type of theory derived from a socio-cultural analysis. “As such, the core assumptions of the model emphasize the functional interdependence of individual and collective learning processes, and include particular attention to the process of “mediation” of learning through the appropriation and transformation of conceptual and material tools” (Peck, Gallucci, Sloan, & Lippincott, 2009, p. 19).

By choosing the social constructivist approach the premise to online learning shifts from asynchronous learning, represented in the current online module, to a process of blended engagement where individual and collaborative learning become the standard in the e-learning environment. In developing a framework to support the design and implementation of a technology-rich curriculum Luckin’s Ecology of Resources model acts as the foundation for the development of the newly re-defined online learning environment (Luckin, 2010).

Luckin’s Ecology of Resources model is derived explicitly from the socio-cultural learning theory of Vygotsky known as the Zone of Proximal Development (ZPD) which is the gap between what a learner has already mastered and what they can achieve when provided with the right educational support (Luckin & Clark, 2012). The Ecology of Resources model will serve to help the school system develop technology-rich learning experiences within a synchronous and asynchronous online learning environment.

## Program Development

The challenge in developing any online learning program is to build lessons in ways that are compatible with learning processes. While the development and use of information technology is rapidly growing Clark and Mayer (2011) suggest, “technology can easily deliver

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**Comment [2]:** I’m not sure what this means? What different types of theories exist? Typically an analysis would be conducted to test and verify a theory. One the theory has been tentatively validated it would be used as the foundation for a model. The model would then be used to design interventions or teaching activities. But scholars would continue to monitor the validity and reliability of the theory as it is being applied in practice.

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**Comment [3]:** Use single quotation marks for quotes within quotes.

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**Comment [4]:** Although a social constructivist approach can still be applied in an asynchronous learning environment.

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**Comment [5]:** How has this model been tested by independent empirical research in an online learning environment? What gaps remain in the testing of the theory and model?

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**Comment [6]:** Support all assertions with appropriate citations.

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**Comment [7]:** Citation? How do we know this?

more sensory data than the human nervous system can process” (p. 25). This is why our school system will incorporate lessons that provide learners with computer-mediated communications (CMC) that include online face-to-face (f2f) and text-based ways to participate in educational discourse in order to support learners at different stages of technology use. This will also sustain the school system’s goal to include both synchronous and asynchronous interactions.

To address the challenge of creating lessons compatible with online learning processes the school system will use Luckin’s Zone of Collaboration (ZOC), which is described as an interpretation of Vygotsky’s ZPD concept and offers a way to provide clarification and specification to the ZPD. This interpretation creates two constructs of the ZOC concept called the Zone of Available Assistance (ZAA) and the Zone of Proximal Adjustment (ZPA) (Luckin & Clark, 2012). These constructs, and the Ecology of Resources model, characterize the learner along with the interactions that form that learner’s experiences and help frame the development and ultimately the implementation of the school system’s blended K-12 online learning environment.

#### ZAA

The first construct in the Zone of Collaboration is where the e-learner engages with a wealth of possible technology resources known as the Zone of Available Assistance (ZAA). The ZAA includes a variety of resources within a learner’s environment that could provide different advantages of assistance. According to Luckin and Clark (2012) there is “a wide range of categories” (p. 4) of resources important to consider when developing an online learning environment. They identify three specific categories of resources: the skills and knowledge to be learned, the tools and people available, and the learner’s learning environment.

#### ZPA

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**Comment [8]:** Is this a contradiction in terms?

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**Comment [9]:** This NCU course and program is focused on online learning rather than blended or distance learning. It is important that a scholar in this discipline be able to make the distinctions.

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**Comment [10]:** ...are?

The second construct in the Zone of Collaboration supports a process of mediations conducted via organized activities known as the Zone of Proximal Adjustment (ZPA). The ZPA identifies relationships between the technology resources selected and measures the extent to which these relationships meet the learner's needs. Luckin and Clark (2012) suggests that this construct supports the learner while "scaffolding" and "adjusting" (p. 6) the resources to meet the learner's needs. The school system recognizes the benefits of using the ZAA and ZPA constructs and will use them to develop curriculum, collect informational technology resources, and create their online learning space while constantly adjusting to meet individual and collaborative learning needs.

### **Professional Development**

Finally, faculty and staff play an important role in the development and implementation of any e-learning program. Al-Shboul and Alsmadi (2010) identify ~~in their research~~ an additional challenge to creating an online learning environment suggesting that "faculty attitudes toward e-learning environments need to be addressed" (pp. 7-8) to increase the probability of the program's success. Providing teachers and staff with on-going professional development is one way to overcome this challenge and improve the level of participation and quality of online instruction. According to Desimone (2009) "the use of a common conceptual framework would elevate the quality of professional development..." thereby giving the school system an understanding of how "best to shape and implement on-going learning opportunities maximizing the benefit of both the teacher and student" (p. 1). However, in order to provide faculty and staff with effective professional development opportunities the school system must first address four areas of consideration taken from Al-Shboul and Alsmadi's (2010, p. 8) list of possible ways to address faculty involvement.

In order for the school system to provide quality and purposeful staff development opportunities ~~there are~~ three areas of the program, ~~which~~ must be addressed. The school system must first evaluate the existing infrastructure, monitor the newly developed online program, and survey teachers to identify areas needed for additional training. Second, the school system should provide ~~teachers with encouragement and support~~ by providing a technology coach who will serve to provide hands-on learning experiences and online lesson modeling to teachers who express a desire to use new technology and e-learning resources within their online classrooms. The third and final consideration the school system should address when preparing to provide opportunities for staff development is the acknowledgement of teachers and staff who consistently and effectively use the online learning environment and its resources effectively to maximize student engagement and learning.

### Conclusion

Developing and implementing any e-learning environment takes careful attention and detailed project management. In this instance it is important to keep in mind the seven steps to effective e-learning and the method most appropriate for taking this school system's traditional asynchronous classes and transforming them into online blended learning environments. The development of this online environment will require considerable time, effort, and forethought; but must specifically ensure that (a) the necessary curriculum is identified, (b) the appropriate technology resources have been carefully selected, (c) teachers and staff have been effectively trained, (d) the learning environment is appropriate and provides the necessary tools and resources required by learners in an online environment, (e) and that there is ongoing professional development and necessary adjustments to the online program to constantly meet the needs of the learner and teacher.

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**Comment [11]:** Avoid expletive constructions in academic writing. These word are superfluous and can be removed without altering the meaning of the sentence.

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**Comment [12]:** Should you be able to expect that professional teachers at this level be proficient learners?

#### References

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